AA-2127

Naval Radio Transmitter Facility Annapolis

Architectural Survey File

This is the architectural survey file for this MIHP record. The survey file is organized reverse-chronological (that is, with the latest material on top). It contains all MIHP inventory forms, National Register nomination forms, determinations of eligibility (DOE) forms, and accompanying documentation such as photographs and maps.

Users should be aware that additional undigitized material about this property may be found in on-site architectural reports, copies of HABS/HAER or other documentation, drawings, and the "vertical files" at the MHT Library in Crownsville. The vertical files may include newspaper clippings, field notes, draft versions of forms and architectural reports, photographs, maps, and drawings. Researchers who need a thorough understanding of this property should plan to visit the MHT Library as part of their research project; look at the MHT web site (mht.maryland.gov) for details about how to make an appointment.

All material is property of the Maryland Historical Trust.

Last Updated: 06-11-2004

MARYLAND HISTORICAL TRUST DETERMINATION OF ELIGIBILITY FORM

NR Eligible: yes____ no___

roperty Name: Naval Radio Transmitter Facility Annapolis Inventory Number: AA-2127
Address: Greenbury Point Road, Naval Academy North Seve City: Annapolis Zip Code: 21402
County: Anne Arundel USGS Topographic Map: Annapolis
Owner: <u>United States Naval Academy</u> Is the property being evaluated a district? <u>X</u> yes
Tax Parcel Number: N/A Tax Map Number: N/A Tax Account ID Number: N/A
Project: Greenbury Point Agency: FCC
Site visit by MHT staff: X no yes Name: Date:
Is the property is located within a historic district? yesno
If the property is within a district District Inventory Number:
NR-listed districtyes Eligible districtyes Name of District:
Preparer's Recommendation: Contributing resourceyes no Non-contributing but eligible in another context yes
If the property is not within a district (or the property is a district) Preparer's Recommendation: Eligibleyes _X_no
Criteria: ABCD CNone
Documentation on the property/district is presented in: Architectural Inventory and Evaluation of Antenna Structures, Naval Radio Transmitter Facility (NRTF) Annapolis, Maryland, by A. Christopher Goodwin & Associates, Inc.
Description of Property and Eligibility Determination: (Use continuation sheet if necessary and attach map and photo)
The Naval Radio Transmitter Facility Annapolis (NRTF) was established in August 1918 with the construction of four 600-foot towers. The establishment of the facility in the midst of World War I was in response to the potential for Germany's disruption of communications between the United States and its allies, Britain and France. Over the course of the twentieth century, continuing into the early 1990s, the site was in constant use as a communications facility. It assumed special importance during World War II, and again during the height of the Cold War. Extensive building campaigns occurred in the early 1920s, the late 1930s, and in 1969. The station was closed in 1996. Ownership of the property has since been transferred to the United States Naval Academy, and the bulk of the facility is now a nature preserve. Tower #8 is now owned by Anne Arundel County.
In 1996, prior to its closure, the NRTF was inventoried and evaluated by R. Christopher Goodwin & Associates, Inc. They documented twenty-one buildings, structures, and antenna systems. At that time, the facility was determined to be eligible for the National Register of Historic Places as a district, under criteria A and C. The conglomeration of antennas and associated buildings was determined to demonstrate the long association of the property with the Navy's communications program, and to illustrate advancements in military technology. In particular, the Low Frequency (LF) "Marconi Triatic" antenna complex was determined to possess a high degree of integrity. This complex was constructed 1941-1942 and consisted of three 800-foot towers, in addition to a transmitter building (Building 60) and two helix houses (Buildings 68 and 69). Building 5, a power
MARYLAND HISTORICAL TRUST REVIEW
Eligibility recommended Eligibility not recommended
Criteria:ABCD Considerations:ABCDEF GNone MHT Comments
Reviewer, Office of Preservation Services 788 Date
Reviewer, NR Program Date
providing that I regium

NR-ELIGIBILITY REVIEW FORM

Naval Radio Transmitter Facility Annapoli

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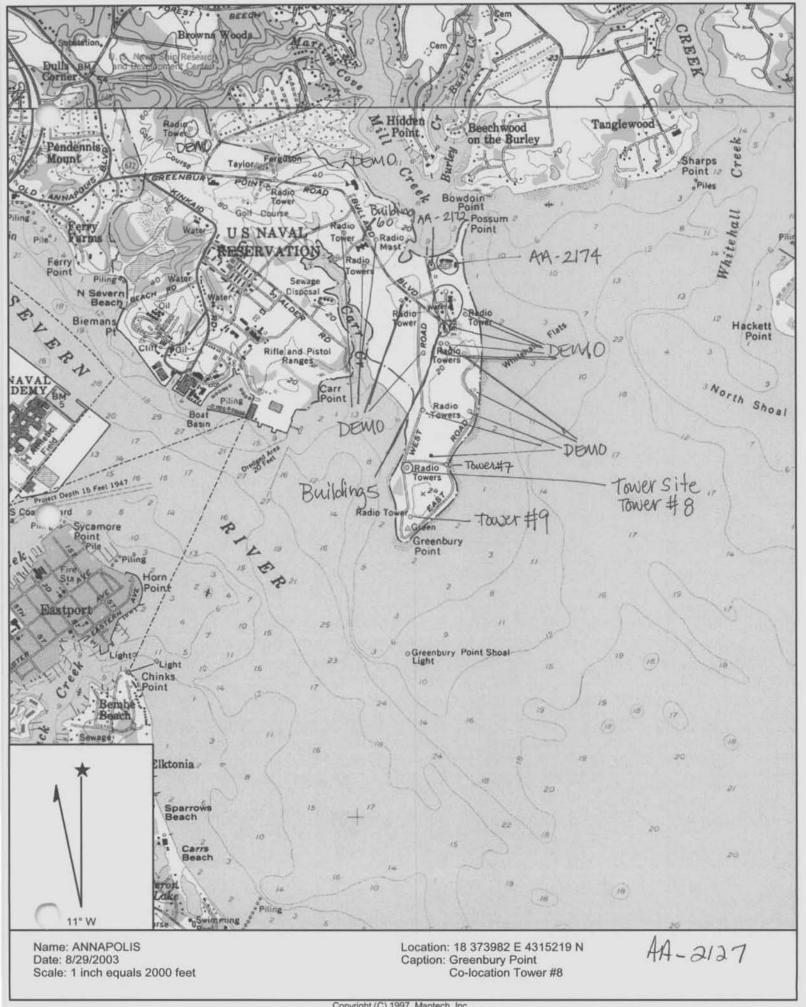
Inventory Number: AA-2127

house/transmitter building originally built in 1918, was determined ineligible, due to changes in function as well as additions and alterations over the course of the twentieth century. Also determined ineligible were Buildings 74, 76, and 77. Constructed during World War II, Building 74 is a primary school, Building 76 was a pumphouse, and Building 77 was a dam. Building 74 was determined ineligible due to extensive alterations, while Buildings 76 and 77 were determined to lack significance.

Since the inventory and evaluation conducted in 1996, many of the buildings and antennas in the NRTF district have been demolished, as part of the site's conversion into a nature preserve. Building 5, Building 60, Building 74, and Towers 7, 8, and 9 are the only remaining structures of those documented in 1996. The antennas of the "Marconi Triatic" array have been demolished, leaving only Building 60, the former transmitter building, now used as the headquarters of a construction unit. Towers 7, 8, and 9, built in 1937, stand alone at the tip of Greenbury Point.

The Naval Radio Transmitter Facility no longer meets National Register Criteria A or C, as it was evaluated to do in 1996. Importantly, the integrity of the district has been compromised by the demolition that has occurred since that time. Deprived of the majority of its antennas and associated buildings, the NRTF no longer conveys its long history as a naval communications facility. Buildings 5 and 74 were determined ineligible in 1996. The only remaining radio towers, 7, 8, &9, have no inherent significance. Building 60 no longer serves its function, and, additionally, now stands alone, thus depriving it of its previous associations. There is no remaining evidence of the advances in military technology that the complete facility demonstrated in 1996. The facility has no known historical association with significant persons, and thus fails to meet Criterion B. Criterion D was not evaluated for this study.

Prepared by:	Gerald Maready/EHT Traceries, Inc.	Date Prepared:	8/29/2003	
Tropumou oj.	Gordia Marcady, Elli Tracolles, Inc.	Date Heparea.	0/2//2003	





AA-2127 Naval Radio Transmitter Facility Annapolis Greensary Point Road Anne Anundet County, Manyland EHT Tracenes, Inc. 9/2003 MD SHOO Towers 7,8, &9, looking south



AA-2127
Naval Radio Transmitter Facility Annapolis
Greenburg point Road
Anne Anundel County, Mangland
Ett Traceries, Inc.
9/2003

2 of 10

towers 8 & 9, 100King south

MD SHOO



AA-2127 Naval Radio Transmitter Facility Annapolis Greenbury point Road Anne Anundel County, Manyland Ett Traceries, Inc.

3 & 10

Towers 8 & 9, 100 King south

9/2003

MO SHOO



Naval Radio Transmitter Facility Annapolis Greenbury Doint Road Anne Arundel County, Manyland Ett Traceries, Inc.

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9(2003

MO SHOO

Tower 7, looking east



Anne Anundel County, Manyland
EHT Traceries, Inc.
9/2003
MD SHPO
100King south, Tower 8 in Foreground, Tower 9 beyond

Naval Radio Transmitter Facility Annapolis

5000

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Anne Anundel County, Manyland EHT Traceries, Inc. 9/2003 MD SHOO Building 5, northeast corner, looking southeast

Naval Radio Transmitter Facility Annapolis

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Greenbary point Road

AA-2127



Naval Radio Transmitter Facility Annapolis Greenburn Point Road Anne Arundel tounty, Maryland EHT Tracenes Inc. 9/2003 MD SHOO Building 60, east corner, looking northwest 7 of 10

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AH-2127 Naval Radio Transmitter Facility Annapolis Greenburg Point Road Anne Arundel County, Manyland Ett. Traceries, Inc.

8 of 10

Building 60, northeast elevation

9/2003

MD SHOO



Naval Radio Transmitter Facility Annapolis Greenbury Point Road Anne Anundel county, Manyland EHT Traceries, Inc. 9/2003 MD SHOO Building 60, north corner, looking southwest 9 of 10

AH-2127



9/2003 MD SHPO Building 74, looking northeast

Greenbury Point Road

EHT Traceries, Inc.

Anne Anundel County, Manyland

AA-2127

Naval Radio Transmitter Facility Annapolis

INDIVIDUAL PROPERTY/DISTRICT MARYLAND HISTORICAL TRUST INTERNAL NR-ELIGIBILITY REVIEW FORM

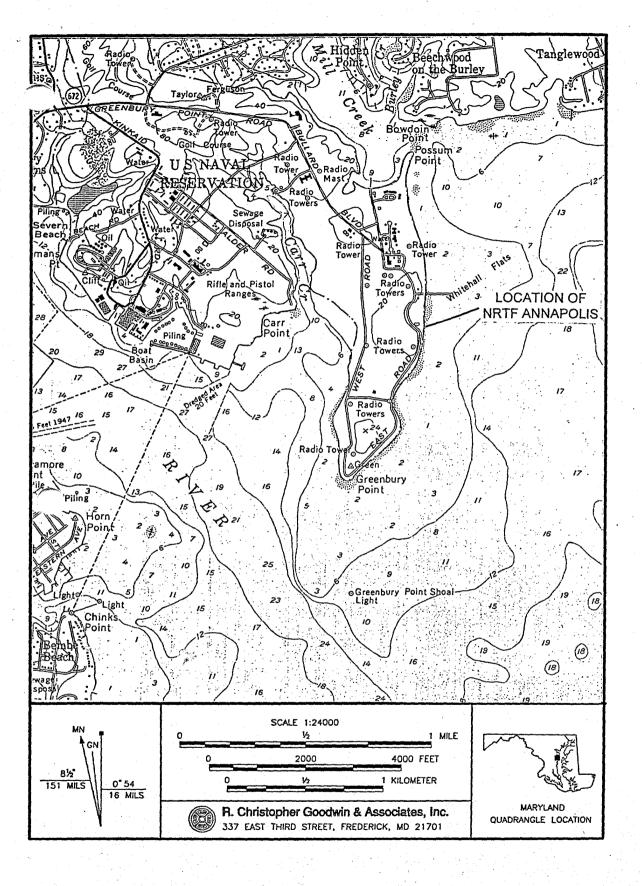
AA-2127 M
Property/District Name: Naval Radio Transmitter Facility Survey Number: An-
Project: Architectural Inventory and Evaluation Agency: Navy
Site visit by MHT Staff: x no yes Name Date
Eligibility recommended x Eligibility not recommended
Criteria: xA B xC D Considerations: AB C D E F G None
Justification for decision: (Use continuation sheet if necessary and attach map)
Based on the draft report, "Architectural Inventory and Evaluation of Antenna Structures, Naval Radio Transmitter Facility (NRTF) Annapolis, Maryland," prepared by R. Christopher & Associates and dated 5 Dec 1995, the World War II-era "Marconi" Triatic antenna and associated buildings 60, 68, and 69 are eligible for the National Register as a multiple component property. The antenna and buildings date to 1941-1942 and are historically associated with Naval communications support during World War II, thus meeting Criterion A. The antenna, a low-frequency transmitter, is also significant as an intact, distinguisable example of a World War II-era triatic anntenna system (Criterion C).
Documentation on the property/district is presented in: Architectural Inventory and Evaluation
of Antenna Structures, Naval Radio Transmitter Facility (NRTF), Annapolis, MD
Prepared by: R. Christopher Goodwin & Associates
David Blick/Jo Ellen Freese February 12, 1996
Reviewer, Office of Preservation Services Date
NR program concurrence: yes no not applicable
Chand fiduit Yeb. 13, 1996.
Reviewer, NR program Date

grag.

_		AA-2127
Survey	No.	111000

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I.	Geographic Region:	
X	Eastern Shore Western Shore	(all Eastern Shore counties, and Cecil) (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's) (Baltimore City, Baltimore, Carroll,
	Western Maryland	Frederick, Harford, Howard, Montgomery) (Allegany, Garrett and Washington)
II.	Chronological/Developmental Pe	riods:
	Paleo-Indian Early Archaic Middle Archaic Late Archaic Early Woodland Middle Woodland Late Woodland/Archaic Contact and Settlement Rural Agrarian Intensification Agricultural-Industrial Transi Industrial/Urban Dominance Modern Period Unknown Period (prehisto	A.D. 1930-Present
III.	Prehistoric Period Themes:	IV. Historic Period Themes:
	Subsistence Settlement Political Demographic Religion Technology Environmental Adaptation	Agriculture Architecture, Landscape Architecture, and Community Planning Economic (Commercial and Industrial) Government/Law X Military Religion Social/Educational/Cultural Transportation
v. R	esource Type:	
	Category: <u>Structure and bu</u>	ildings
	Historic Environment: Rural	
	Historic Function(s) and Use(s): <u>Defense - Naval facility</u>
	Known Design Source: <u>Departm</u>	ent of the Navy, Bureau of Yards and Docks



AA- 2/27
United States Naval Academy, North Severn
Anne Arundel County

Capsule Summary

The United States Naval Academy North Severn property is a 501 ac property located on Greenbury Peninsula on the north side of the Severn River across from the USNA campus (Figure 1). The property was formerly a part of the Naval Radio Transmitter Facility (NRTF) Annapolis, but was acquired by the Naval Academy in 1977 for use as a golf course. The North Severn property consists of an 18-hole golf course and several buildings.

A 1980 National Architectural and Engineering Record (Kapsch 1980) inventory documented 6 buildings on the USNA, North Severn grounds. Buildings were evaluated according to the National Register Criteria for Evaluation (36 CFR 60.4), categorized according to their relative historical and architectural importance, and assigned one of five management categories. All of these buildings were assigned to Category IV and were considered to be of no historical value at the time.

As part of the 1996 update to the Naval Academy Historic Preservation Plan, Naval Academy buildings designated as Category IV and V and constructed before 1947 were surveyed and reevaluated for those qualities of significance and integrity identified in the *National Register of Historic Places Criteria for Evaluation* (36 CFR 60). Category I-III buildings are considered eligible for the National Register of Historic Places. Three buildings, NA74, NA76, NA77 are the focus of the current investigation (Figure 2).

The Primary School/Golf Clubhouse, Building NA74, consists of a two-story, wood frame core and several one-story additions, forming a shallow V-shaped building. The core was constructed in 1943 as a school, and retains its canopied double-door entrance with sidelight and transom. Other doors, as well as the windows, are replacement units. The building features a three-story square tower, which is situated at the apex of the V. The core was enlarged with a major one-story addition appended to the south side, and two smaller additions appended to the north side.

Building NA76 is a one-story, utilitarian pumphouse. The wood frame support building, which rests on a concrete foundation, is one-bay wide and two-bays deep, and terminates in a gable roof. Building NA77 is a concrete dam.

Buildings NA74, NA76, and NA77 bear no direct association with important themes and events embodied by the Naval Radio Transmitter Facility. Physically, they are isolated from the facility core and do not possess distinctive characteristics representative of a type, period, or method of construction. These buildings do not possess the qualities of significance or integrity for listing in the National Register of Historic Places.

Maryland Historical Trust State Historic Sites Inventory MARTLAND INVENTORIC PROPERTIES Form

MARYLAND INVENTORY OF

Survey No.

AA-2127

Magi No.

DOE __yes __no

1. Nam	(indicate pre	ferred name)		
historic NAV	AL RADIO TRANSMITTER	R FACILITY ANNAPOLI	S	
and/or common	U.S. NAVAL ACADEMY,	NORTH SEVERN		
2. Loca	ation			
street & number	MARYLAND AVENUE			not for publication
city, town Al	NAPOLIS	_X_vicinity of	congressional district	FOURTH
state MAI	RYLAND	county	ANNE ARUNDEL	
3. Clas	sification			
Category district _X building(s) structure site object	Ownership _X_ public private both Public Acquisition in process being considered not_applicable	Status _X_occupiedunoccupiedwork in progress Accessible _X_yes: restrictedyes: unrestrictedno	Present Use agriculture commercial educational entertainment government industrial military	museum park private residence religious scientific transportation X other: RECREATION
4. Own	er of Proper	ty (give names a	nd mailing addresse	s of <u>all</u> owners)
name SIII	PERINTENTDENT, U.S. 1	NAVAT ACADEMY		
street & number		MITTER THOUSANT	telephone no).:
city, town Al	NNAPOLIS	state	and zip code MARY	LAND
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street & number	and the second s	· · · · · · · · · · · · · · · · · · ·		folio
city, town	ANNAPOLIS		state	MARYLAND
6. Rep	resentation	in Existing	Historical Surv	eys
title HISTORIC	. BUILDING INVENTORY	OF THE UNITED STATE	res naval academy	
date NOVEMB	ER 1980		X federal stat	e county local
depository for s	urvey records LIBRARY	OF CONGRESS, DIVIS	ION OF PRINTS AND P	HOTOGRAPHS
city, town	WASHINGTON		state	DC
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/. Dest	- iption				rvey wo.	AA -2127
Conditionexcellent _X_goodfair	deteriorated ruins unexposed	Check one unaltered _X_ altered	Check one _X original site moved date	of move		

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

SEE ATTACHED SHEETS

United States Naval Academy, North Severn Anne Arundel County Page 7.1

Summary Description

The U.S. Naval Academy North Severn property is located on the north side of the Severn River across from the Naval Academy proper. The 501-acre property, which consists of numerous buildings and an 18-hole golf course, previously was associated with the Naval Radio Transmitter Facility (NRTF) Annapolis until the Academy acquired the property in 1977. The focus of this recordation was the primary school/golf clubhouse, Building NA74, a pumphouse, Building NA76, and a dam, Building NA77, which are located on the extreme north side of the property, in proximity to the golf course.

The original core of the primary school/golf clubhouse is a two-story, wood frame school constructed in 1943. The structure subsequently was enlarged with several hipped roof, one-story additions. It currently is utilized as a golf clubhouse. The pumphouse is a one-by-two bay, wood frame utilitarian structure. It rests on a concrete foundation and terminates in a gable roof. Adjacent to the pumphouse is Building NA77, a concrete dam.

Description

Primary School/Golf Clubhouse (NA74)

The primary school/golf clubhouse, Building NA74, was constructed as a school in 1943. The wood frame, V-shaped building rises on a concrete foundation. A square, three-story tower is located at the apex of the V, separating two distinct blocks with different elevations. On the north side of the tower, the original two-story section terminates in a side-gable roof. On the south side of the tower, a one-story addition terminates in a hipped roof and incorporates an exposed basement.

Horizontal aluminum siding covers the original horizontal lapped wood siding. Generally, windows are double-hung, one-over-one-light metal sash units. The primary entrance, located to the west of the tower, contains wood double doors with sidelights and a transom. A canopy, supported by two wood columns, shelters the entrance. This building has been modified substantially through door and window changes and multiple additions, including the one-story south addition; two, one-story hipped roof additions appended to the north of the core section; and a rear screened-in porch extension.

Pumphouse and Dam (NA76 and NA77)

Building NA76 is a one-story, rectangular, wood frame pumphouse supported by a concrete foundation. The building is one-bay wide and two-bays deep, and terminates in a gable roof with overhanging eaves. A wood double door provides access to the building. The pumphouse is utilitarian and similar to other utilitarian structures operated by the U.S. Naval Academy. Building NA77 is a poured concrete dam, approximately 50' long. The concrete wall extends approximately 1' above the surface of the water and is level with the ground. A steel pipe railing extends the length of the structure. The dam contains a small reservoir on the Academy golf course.

8. 5	Sign	ificance		Survey No. AA-21	27
Period prel 140 150 160 170 180 X 190	0-1499 0-1599 0-1699 0-1799 0-1899	Areas of Significance—C — archeology-prehistoric — archeology-historic — agriculture X architecture — art — commerce — communications		law	religion science sculpture social/ humanitarian theater transportation other (specify)
Specific	c dates		Builder/Architect		
check:	a	icable Criteria: XA nd/or icable Exception:		EFG	
	Leve	l of Significance: X	_nationalstate	local	
Prepare		a summary paragraph	of significance and	a general statement of	history and

SEE ATTACHED SHEETS

United States Naval Academy, North Severn Anne Arundel County Page 8.1

Significance Summary

The 501-ac North Severn property was formerly a portion of Naval Radio Transmitter Facility (NRTF) Annapolis, an important Naval communications center. Now owned by the Naval Academy, the property consists of several buildings and a golf course. Two buildings and one structure constructed during NRTF Annapolis' ownership of this site were documented: Buildings NA74, NA76, and NA77. The former is a former school that has been enlarged and converted into a golf clubhouse, and the latter are a utilitarian pumphouse and concrete dam. The conversion of Building NA74 from a school into a golf clubhouse was accomplished through several major additions and alterations.

Buildings NA74, NA76, and NA77 are examples of support structures that bear no direct association with important themes and events embodied by the Naval Radio Transmitter Facility. Physically, they are isolated from the facility core and do not possess distinctive characteristics representative of a type, period, or method of construction. These buildings do not possess the qualities of significance or integrity for listing in the National Register of Historic Places.

History and Support

North Severn History

European settlers are reported to have occupied the North Severn property as early as 1645. A group of Puritans, led by Richard Bennett, secured a land grant incorporating 250 ac that extended north from Greenbury Point to Mill Creek; an additional 250 ac grant incorporated the area north of Possum Point. The entire settlement was referred to as "Towne Point at Severn" (Luckenbach 1995:5). The property was subsequently divided into individual farmsteads for growing tobacco and raising livestock. The properties were eventually consolidated under a single owner, Nicholas Greenberry. In 1737, the property was acquired by Colonel Charles Hammond and combined with several other parcels to form the parcel known as "Hammond's Inheritance" (Beauregard et al. 1994:35).

Through the mid-nineteenth century, land use on the majority of Greenbury Neck remained relatively unchanged, including the Hammond's Inheritance tract, which remained as an undivided agricultural tract. Mid-nineteenth century U.S. Coastal Survey maps and land plats identify the northern section as the property of Lemuel Taylor (National Archives and Records Administration [NARA] 1844a, 1844b). The Taylor residence and farm complex, which has been associated with the Charles Hammond residence, was located overlooking Mill Creek on what is now the golf course on the Naval Academy, North Severn property (Beauregard et al. 1994:17). By the 1870s, the southern half of the North Severn property had been acquired by Col. Theodore Corner, whose residence and farm was located midway between Possum Point (Mill Creek) and Greenbury Point (Hopkins 1878).

In 1910, the Navy purchased a 180 ac property from Theodore Corner, which consisted at the time of four structures and what appeared to be an orchard (U.S. Naval Academy, Public Works Department [USNA, PWD] 1916). Initially, the Naval Academy operated a small dairy farm at Greenbury Point. However, this small operation failed to meet the needs of the Academy, and in 1913, the Navy moved the dairy farm to a much larger tract in Gambrills, Maryland. The Academy subsequently established a hog farm on the 100 ac southern portion of the former Corner parcel. This farm, which contained four dwellings, a milk house, cook house, a hog house, four barns, and a wagon shed, was established primarily as a means of disposing of garbage generated in the dining halls in Bancroft Hall, located on the Academy's campus (USNA, PWD 1918; Midshipmen's Store and Service Division 1929). The Academy

prided itself on maintaining a scientific operation, complete with hog houses, breeding platforms, and built-in concrete troughs on the 10-ac developed portion of this facility. The remaining 90 ac were used for pasturage, livestock exercise lots, and alfalfa and corn production. None of the average 350 hogs raised on the farm were utilized to feed the corps of midshipmen. Most of the excess stock was sold to the stockyards in Baltimore, and some meat was sent to feed the unmarried employees at the dairy Farm in Gambrills (Midshipmen's Store and Service Division 1929:21, 26).

The northern portion of the former Corner farm was developed as a radio transmission facility. The Navy had began testing wireless apparatus as early as 1899, and in 1900, radio stations were established at Washington, D.C., and at the Naval Academy itself. During the ensuing 15 years, the Navy established additional naval shore and ship stations on both coasts, as well as its own radio research laboratory in Anacostia, and a high-power transmitting station at Arlington, Virginia (Gebhard 1979:8; Office of the Chief of Naval Operations 1961:3-4). With the advent of World War I, the Navy Department assumed the responsibility for establishing and operating a transatlantic communication system. This system included former commercial properties, transmitting facilities, receiving stations, testing facilities, communications schools, and additional high-power transmission stations on United States possessions in the Pacific and in the Caribbean (Best 1996). By the end of the war, the Navy's communications network included the highest powered arc transmitters in the United States, and was capable of communicating with Navy ships throughout the world (Office of the Chief of Naval Operations 1961:7-9; U.S. Navy Department, Bureau of Yards and Docks 1921:365).

The Naval Radio Transmitting Station [NAVRADSTA (T)] at Annapolis was established in 1917 to provide a secure communications link between the United States, France, and England. The Annapolis site was selected due to its remote location along the Chesapeake, as well as for its proximity to Washington (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6; "Radio Transmitting Facility Annapolis, Maryland", n.p.). In 1918, the Navy entered into an agreement with France for the Navy to construct a high-power, long-wave station in France (Office of the Chief of Naval Operations 1961:9). NAVRADSTA (T) Annapolis, established in 1918 as a high-powered Very Low Frequency (VLF) station, was designed to operate in conjunction with the French transmitter.

The station was commissioned in August 1918 using two 500-kw Poulson Arc Converter VLF transmitters built by Federal Telegraph Company of San Francisco under a contract from the Bureau of Steam Engineering. Four 600-foot radio towers (Nos. 1-4), designed by the Austin Company, were erected as part of the original construction campaign (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6, "Radio Transmitting Facility Annapolis, Maryland", n.p.). In addition to the towers, the transmission site also contained a power house and transmitter house, an operator's dwelling, Marine barracks, the residences of the officer in charge and the chief petty officer, a wharf at Possum Point, and a water-supply system (USNA, PWD 1918). The two 500-kw arcs installed in the operations building (Building 5) provided coverage for the Atlantic Ocean, England, and Europe. The station was completed by the summer of 1918, and the first message was sent to France in early September (Gebhard 1979:9). At the time of its completion, the Annapolis station was one of the most powerful in the United States and the world (U.S. Navy Department, Bureau of Yards and Docks 1921:365-366).

The transmitter facility was expanded and modified during the 1920s. In 1922, two additional towers (Nos. 5 and 6) were constructed (Best 1996). The Marine Barracks were modified to accommodate married enlisted men's quarters, and artesian wells, septic systems, and a technical support building were constructed. North of the fenced facility, the installation's wharves were expanded and several barns were

constructed (USNA, PWD 1928). The Naval Academy Hog Farm continued to occupy the land south of the transmission facility.

Development of the northern portion of North Severn proceeded along a different track during this period. The former Taylor property went through a series of owners, including Thaddeus Davids, L. A. Palmer, and C. E. Remson, who acquired it in 1889 (Hopkins 1878; USNA, PWD 1934). An undated survey of this property showed that land use during this period was devoted to agriculture. Approximately 59 ac at the northernmost point of the tract remained wooded, while the remainder had been divided into fenced fields of 8-28 ac. Two peach orchards were present within the property, and a residential complex of three buildings was located overlooking Mill Creek. At the head of Carr's Creek near the southern boundary of the property, a small portion of land was designated as a "Mineyard;" this parcel may have been associated with the rifle ranges then under development on the neck of land between Carr's Creek and the Severn River (USNA, PWD n.d.). At some time prior to 1934, the Remson farm was acquired by the Greenbury Land and Development Company, presumably for development as a recreational or vacation complex. One small 7 ac parcel bordering Mill Creek was owned by the Acme Realty Company of Maryland (USNA, PWD 1934).

During the 1930s, the mission of NAVRADSTA Annapolis was expanded to include high frequency radio transmissions. During this period, High Frequency (HF), Medium Frequency (MF), and Low Frequency (LF) transmitters were added to support the original VLF arc converter transmitters (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6). In 1937, the original VLF transmitter was replaced, and a new antenna system installed (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6; "Radio Transmitting Facility Annapolis, Maryland", n.p.).

Other modifications included the addition of one new building at Possum Point and the extension of the unpaved Greenbury Point Road from the transmitter station complex to the southern tip of the point. In 1935, the Hog Farm was relocated to the northern portion of the tract, between the transmitter facility and the wharf at Possum Point (USNA, PWD 1935a, 1935b).

By 1940, the Navy's radio communication system encompassed a global chain of high, medium, and low frequency transmitting stations, receiving stations, and supplementary stations. The Bureau of Yards and Docks' construction program for radio stations in the continental United States during World War II was relatively modest, with allocations for buildings and structures totaling \$25,000,000. Additional funds allocated for new equipment under the Bureau of Ships were used to make improvements to both west and east coast facilities, including Annapolis. The major emphasis was directed towards expanding overseas radio facilities at Hawaii and other advanced bases (U.S. Navy Department, Bureau of Yards and Docks 1947:401).

World War II forced a tremendous expansion of the capacity of the Annapolis Station. During the war, NAVRADSTA Annapolis became the "primary transmitting station for communication command and control with deployed units" (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6). The station's capacity was upgraded with the construction of 50 kw LF transmitters, and a continuous "modernization plan" was instituted. The station's pre-war complement of 24 radio operators was increased to 50 during the war, and the number of radio transmitters almost tripled (Office of the Chief of Naval Operations 1946:45-46). The facility also made minor infrastructure and support improvements with the construction of a pumphouse (NA76), a concrete dam (NA77) and reservoir, and school (NA74).

United States Naval Academy, North Severn Anne Arundel County Page 8.4

Expansion of the facility's mission necessitated changes in land use at the installation. The former Remson Farm property bordering Mill Creek was acquired in 1942, and was utilized to accommodate the expanded transmission facilities, including five transmission towers, a receiving station, a bachelors' officers' quarters, and a golf course (USNA, PWD 1943a). On the transmitter parcel itself, the site of the former hog farm was developed for additional residential housing, and the wharf facilities at Possum Point apparently were dismantled (USNA, PWD 1943b).

The post World War II era was dominated by increased hostilities in Soviet-American relations and a proliferation of new technologies in communications. Developments at NAVRADSTA Annapolis responded to and reflected these outside influences. In August 1953, the Annapolis facility became part of the U.S. Naval Communications Station, Washington, D.C., which consisted of a communications center and two other radio stations (Cheltenham and Arlington). In 1955, microwave communications were installed between Cheltenham and Annapolis to replace telephone land lines.

Construction activity at Annapolis during the late 1940s and 1950s included a transmitter building (Building 128); a helix house; a battery house (Building 138); a Communications Control Link Building (Building 150); an AN/FRT-4 transmitter; an 800-foot vertical radiator tower; three AN/FRT-39 transmitters in Building 60; seven AN/FRT-25 transmitters; and, Communication Moon Relay (CMR) transmitter building (Building 451). A microwave duplex teletype circuit also was activated with Fort Ritchie, Maryland. In 1958, a 200-foot steel tower was erected at the north end of the Annapolis radio station, and a 190-foot steel tower was constructed adjacent to Building 60 (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6).

The 1960s and 1970s were a dynamic period for Annapolis, as many of the earlier, now obsolete transmitter systems were upgraded to accommodate newer, state-of-the-art systems. The original 1918 radio towers (Contract 2650-1918) were demolished in 1969. Transmitters were removed or transferred to other facilities. The Model TBJ VLF system, installed in 1938, remained in continual use until 1969, when it was upgraded to a new system (Model AN/FRT-87 VLF) designed by Continental Electronics. The VLF system was capable of communicating with submerged submarine 50 to 60 feet below the surface (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6; "Radio Transmitting Facility Annapolis, Maryland", n.p.; J. Schorpp, personal communication, 17 November 1995).

The station was renamed Naval Radio Transmitter Facility (NRTF) in 1974 and became a component of the Naval Communications Area Master Station (NAVCOMTELSTA), Atlantic. As a department of NAVCOMTELSTA, NRTF Annapolis was a vital link in the communications system that served the fleet and the Defense Communications Agency. The mission of NRTF Annapolis was to "operate and maintain those facilities, equipments, devices and systems necessary to provide reliable communications for the command, operational control and administration of the Naval establishment ashore and afloat, and to perform such other functions as may be directed by the Commanding Officer" (Naval Radio Transmitter Facility n.d.).

During the 1970s, the station's total acreage was reduced. When the requirement for HF operations was eliminated in 1976 with the introduction of satellite communications, the MF and HF transmitters at NRTF Annapolis were removed or transferred. In contrast, an upgrade of communications equipment, including state-of-the-art, computer-aided LF and VLF systems, was in place in the mid-1970s. These new systems provided communications to the Atlantic and Mediterranean fleet units.

United States Naval Academy, North Severn Anne Arundel County Page 8.5

In 1988, the submarine base at Kings Bay, Georgia was linked with NRTF Annapolis, providing them with LF and VLF communications capabilities via Annapolis. In October 1988, a CVLF terminal was installed at NRTF, which was designed to meet the needs of submarine tenders, and NATO submarine and surface platforms (Nimitz Library, Miscellaneous Records of the Naval Station, Box No. 1, Folder No. 6).

Analysis

Buildings NA74, NA76, and NA77 of the Naval Academy, North Severn property were evaluated under both Criteria A and C of the National Register of Historic Places. Each building, once associated with NRTF Annapolis, was assessed for its role as support buildings for personnel involved in communications activities (Criterion A), and for its ability to represent a distinctive architectural type, period, or method of construction, i.e., an example of World War II permanent, military construction (Criterion C). Building NA74, the primary school/golf clubhouse, is in good condition. The building was modified with several additions, and its original building fabric was removed. Although the building retains integrity of location, the building lacks integrity of design, materials, workmanship, setting, feeling, and association due to the extensive modifications to the building. Therefore, it does not meet Criteria A or C.

Building NA76 is a pumphouse in good condition. It is a utilitarian structure similar to many other utilitarian structures of the same era operated by the Naval Academy. Its design is not distinctive, nor is its setting, feeling, or association to the World War II era particularly apparent. Building NA76 does not possess the qualities of significance or integrity to meet Criteria A and C. Building NA77 is a concrete dam in good condition. The structure's design is not distinctive, nor is its setting, feeling, or association to the World War II era particularly apparent. Building NA77 does not possess the qualities of significance or integrity to meet Criteria A and C.

Buildings NA74 and NA76 were inventoried as part of a 1996 update to the U.S. Naval Academy Historic Preservation Plan. In 1980, the National Architectural and Engineering Record conducted a survey and building inventory of 278 buildings at the Naval Academy. These buildings were categorized according to their relative architectural and historic importance utilizing Navy standards for treatment of historic properties. Buildings NA74 and NA76, originally categorized as possessing no historical importance, were reevaluated for those qualities of significance and integrity identified in the *National Register of Historic Places Criteria for Evaluation* (36 CFR 60). Archival and field investigations revealed that Buildings NA74 and NA76 do not possess the qualities of significance and/or integrity for listing in the National Register of Historic Places.

Maryland Comprehensive Historic Preservation Plan Data

Geographic Organization:

Western Shore

Chronological/Developmental Period(s):

Modern Period A.D. 1930-present

Historic Period Theme(s):

Military

Architecture

Resource Type:

Category: Buildings

Historic Environment: Rural

Historic Function and Use: Education/School

Known Design Source: None

SEE ATTACHED SHEETS

10. Geograph	hical Data		
Acreage of nominated propert Quadrangle name ANNAPO UTM References do NOT of	•	ences	Quadrangle scale 1:24,000
Zone Easting	Northing	B Zone Eas	sting Northing
C		D	
Verbal boundary descripti	on and justification		······································
SEE A	TTACHED SHEET		
The state of the s		apping state or count	y boundaries
List all states and countie		apping state or count	y boundaries code
List all states and countie	s for properties over	-	
List all states and countie	s for properties over code code	county	code
List all states and counties state state 11. Form Pre	code code	county	code
List all states and countiestate state 11. Form Pre	code code pared By o'DONNELL, LEX CA	county county AMPBELL, MARTHA WI	code
List all states and counties state state 11. Form Pre	code code code code code code code code	county county AMPBELL, MARTHA WI CC., INC. date	code code LLIAMS

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to:

Maryland Historical Trust Shaw House 21 State Circle

Annapolie, Maryland 21401

(301) 269-2438

MARYLAND HISTORICAL TRUST DHCF/DHCD 100 COMMUNITY PLACE CROWNSVILLE, MD 21032-2023 514-7500

PS-2746

MAJOR BIBLIOGRAPHIC RESOURCES

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1860 Map of Anne Arundel County, Maryland. S. J. Martenet, Baltimore.

Midshipmen's Store and Service Division

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National Archives and Records Administration

1844a [Map of] U.S. Coast Survey, Severn River Lower Part, Maryland. Preliminary version.

1844b [Map of] U.S. Coast Survey, Severn River Lower Part, Maryland. Final version.

Naval Radio Transmitter Facility

n.d. "Radio Transmitting Facility Annapolis, Maryland"

Nimitz Library, United States Naval Academy

n.d. Miscellaneous Records of the Naval Station, Box 1-3. U.S. Naval Academy, Annapolis.

Office of the Chief of Naval Operations

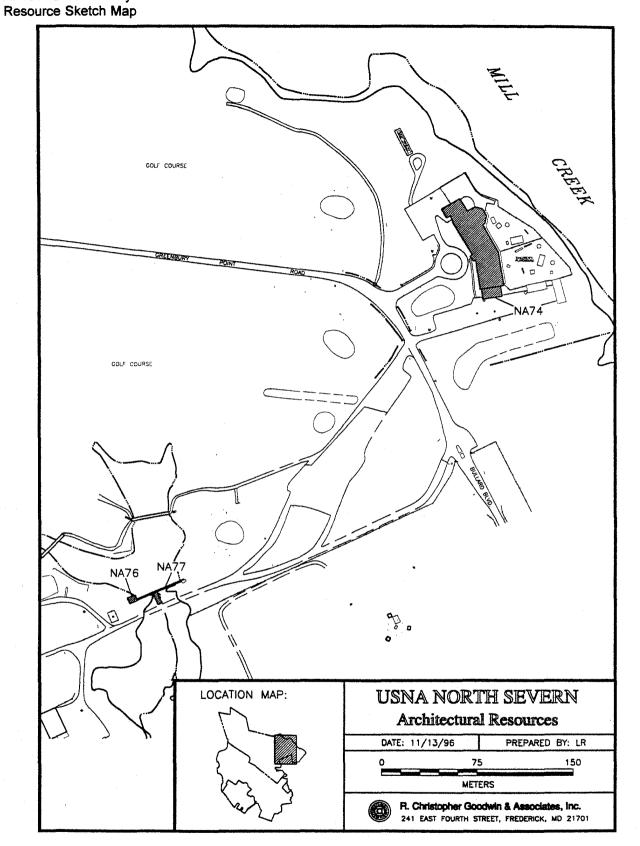
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- 1961 U.S. Naval Communications Chronological History. U.S. Naval Communications.
- U.S. Department of Navy, Bureau of Yards and Docks
 - 1921 Activities of the Bureau of Yards and Docks Navy Department. U.S. Government Printing Office, Washington.
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- U.S. Naval Academy, Public Works Department
 - n.d. Survey of Greenberry Farm, containing 302 1/4 Acres. Map #3021.
 - 1916 Plan of Government Reservation on North Side of Severn River, near Annapolis, Maryland. Greenbury Neck and Rifle Ranges. Map #3312.
 - 1918 Plan of Government Reservations on Northeast Bank of Severn River, Annapolis, Maryland. Map #3493.
 - 1934 Right of Way from County Road to HP Radio Station. Department of Buildings and Grounds. Photostat. Map #25.
 - 1935a Three 600 ft Towers, H.P. Radio Station. Buildings and Grounds, United States Naval Academy. Map #5386.
 - 1935b Map of High Power Radio Station, Annapolis, Maryland, showing conditions on June 30, 1935. Map # 4697.
 - 1943a North Severn: Drill and Combat Training Areas. Topographic Map #7452. Severn River Naval Command.
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Verbal boundary description and justification

The survey boundary includes the entire North Severn property defined by the USNA, North Severn real property records.

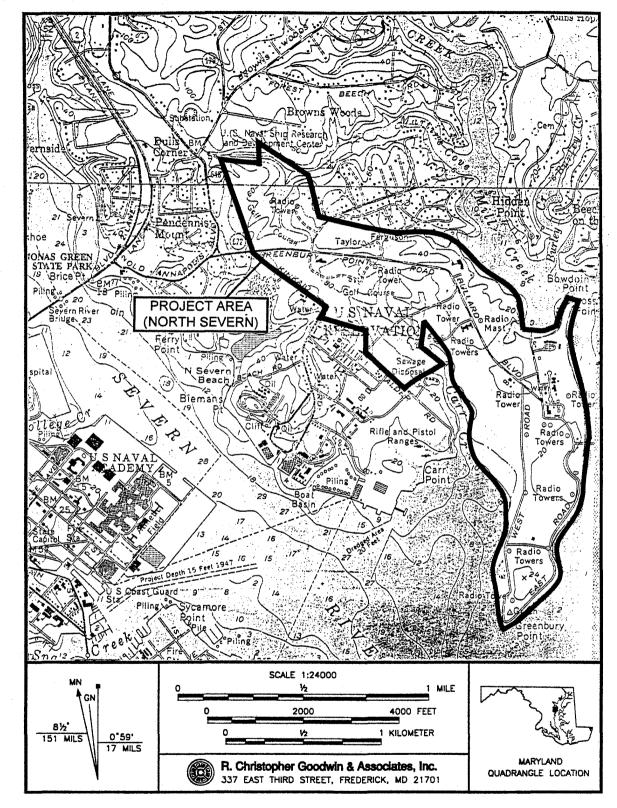
AA- 2/27
U.S. Naval Academy, North Severn
Anne Arundel County



AA- 2/27 U.S. Naval Academy, North Severn

Anne Arundel County

Locational Map: USGS Annapolis Quadrangle Map



TRANSMITTAL LIST: RECORDATION OF THE MARCONI TRIATIC ARRAY

<u>I.</u> Photographic Documentation

- A. Slides were previously transmitted and have been accepted
- B. Black and White Photographic Prints (20 incl. negatives)
 - 1. Bldg. # 60 SE Corner etc
 - 2. West Tower (# 66)
 - 3. Bldg. # 60 South Elevation, oblique view
 - 4. East Tower, inoperative, (# 64)
 - 5. North Tower (# 65)
 - 6. North Tower (# 65)
 - 7. Bldg. # 60 NE Corner
 - 8. West Tower (# 66)
 - 9. Bldg. # 60 East Elevation, oblique view
 - 10. South Tower (# 67)
 - 11. North Tower (# 65), rigging in foreground
 - 12. Bldg. # 60 East Elevation, entrance detail
 - 13. Bldg. # 60 West Elevation, oblique view; Helix House, Bldg. # 69 at left
 - 14. Bldg. # 60 NE Corner
 - 15. Machinery at base of West Tower (# 66)
 - 16. Helix House, Bldg. # 68
 - 17. Bldg. # 60 West Elevation; Helix House, Bldg. # 69 in foreground
 - 18. Helix House, Bldg. # 68
 - 19. Helix House, Bldg. # 68
 - 20. The Marconi Triatic Array complex from the north, incl. other towers

II. Written Documentation

- A. The final report entitled "Architectural Inventory and Evaluation of Antenna Structures, Naval Radio Transmitter Facility (NRTF), Annapolis, Maryland", R. Christopher Goodwin Assocs., Dec 5, 1995 was previously submitted and has been accepted.
- B. The original photographs used as illustrations in the above referenced report were lost and have been retaken as of Oct 13, 1999. As per the Index to Photographs in the Goodwin report, there are Photographs 1, 2, 3, 5, 6, 7, and 9 of 9 showing the structures present in 1995 which survive. Photographs 4 and 8 of 9 are the sites of Buildings # 49 and 151, which were demolished in the interim. Negatives are provided.
- III. Copies of Engineering Drawings from the Public Works Vault, Halligan Hall, U. S. Naval Academy
 - A. Bureau of Yards & Docks (Y&D) Drawing 147550 "300 Ft. Radio Towers, General Plans & Elevations, Location Plan" U. S. Naval Radio Station, Annapolis, MD, app. 9-17-40
 - B. Y & D Drawing 147551 "300 Ft. Radio Towers, Details at Panel Points 1-M,N-N,O-O,O-2, PQ",
 U. S. Naval Radio Station, Annapolis, MD, app. 9-17-40
 - C. Y & D Drawing 147552 "300 Ft. Radio Towers, Details at Panels: H-K-L-M", U. S. Naval Radio Station, Annapolis, MD, app. 9-17-40
 - D. Y & D Drawing 147554 "300 Ft. Radio Towers, Details at Panels A,C,D,E,F,J", U. S. Naval Radio Station, Annapolis, MD, app.9-17-40
 - E. Y & D Drawing 14555 "300 Ft. Radio Towers, Foundations for Sheaves & Winches, Foundation for Tower No. 4", U. S. Naval Radio Station, Annapolis, MD, app.9-17-40
 - F. Y & D Drawing 147556 "300 Ft. Radio Towers, Plans & Details, Electrical Work", U. S. Naval Radio Station, Annapolis, MD, app. 9-17-40
 - G. Y & D Drawing 153812 "TCG Helix Houses A & B, Plot Foundation and Floor Plans" High Power Radio Station, Annapolis, MD, app. 2-14-42

- H. Y & D Drawing 153813 "TCG Helix Houses A&B, Elevations & Sections, Roof Roofing Plan", High Power Radio Station, Annapolis, MD, app. 2-14-41
 I. Y & D Drawing 153814 "TCG Helix Houses, Grounding Plan, Entrance, Entrance Doors, Ladder
- and Miscellaneous Details", High Power Radio Station, Annapolis, MD, app. 2-14-41



2 87630-67 NHT No. AA-2127 NAVAL RADIO STATION ANNAPOLIS ANNE Frundel County A. Donald LAWPENCE October 1999 VIEW: NES ANDW elev. of TRANSmitter Blog. (BLDG S) AND Helix House in Background 1/9



2-87830-49 MHT No AA-2127 NAVAL PADIO STATION ANNAPOLIS Anne Arundel County A. DONAS LAWKENCE October 1999 View: NW SAND E elev. OF Helix Honse with BLOGS IN BACKGROUND 2/9



MHT No. AA-2127 NAVAL RADIO STATION ANNAPOlis ANNE Arundel County A. DONALD LAWRENCE View: NW, 600-Foot Steel RADIO TOWER (1937) With Newer Guide Towers in BACKground

3/9



2-87130-53 MHT NO. AA-2127 NAVAL PADIO Station Annapolis ANNE Arundel County A. DONALD LANCELLENCE October 1999 Yiew: GW, N+E elev of site of Helix House Foundation (BLDG 49 DEMO (15Hed)



1-87830/45 MHT No. AA-2127 NAVAL RADIO STATION ANNAPOLIS ANNE Arundel County A. DORACD LAWRENCE October 1999 VIEW! SE, N+Welev of LE TRANSmitter BUDG (BUDG 60)



1-87850 /3 MHT No. AA-2127 NAVAL RADIO STATION ANNApolis Anne Arundel County A DONALD LAWRENCE October 1999 View: S, Detatl of Main ENTINCE BLOG 60



1-8-183011 MHT No. AA-2127 NAVAL RADIO Station ANNAPOLIS ANNE Arundel County A. DONALD LAWRENCE October 1999 View: W.SW corner BLDG 60



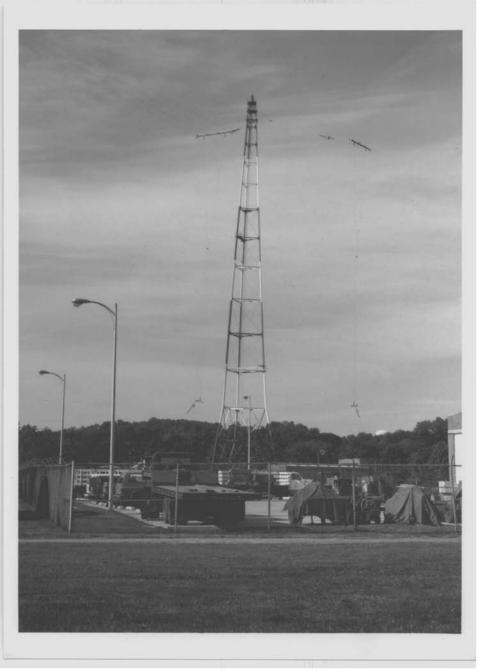
2.87830-52 MAT No. AA-2127 NAVAL PADIO GLATION ANNAPOLIS ANNE Arundel County A. DONALD LAWRENCE October 1999 VICW: N. Exs elev. of Communication Moon Relay BLOG site Foundation 8/9 (BLDG 151 DemolisHed)



MHT NO. AA-207 NAVAL RADIO STATION ANNAPOlic, ANNE Arundel A. DONALD LAWRENCE View: S, Cower 5.83830 Monopole ANTENNA (Inoperative) 9/9



1-87830 /7 MHT NO. AA-2127 NAVAL RADIO STATION ANNAPOLIS Anne Arandel County A. DONALD LAURENCE October 1999 1/20 BLOW. 60 N TOWER (65)



1-87830 / 50 MHT No. 44-2127 NAVAL ZADIO STATION ANNAGOLIS, ANNE Avandel County A. DONALD LAWRENCE October 1999 View: W Tower (66) E ELEV. Forground st Corner of BLDE GO complex 0/20



MHT NO. AA-2127 NAVAL RADIO STATION ANNAGOLIS Anne Aryndel County A DONALD LAWRENCES October 1999 View: 9 elev BLOG 60 N Tower (65) Background 3/20



1-87830/44 NH1 NO. AA -2127 NAVAL RADIO STATION ANNAPORTS ANNE Arandel County A. DONALD (SWEENCE October 1999 Villa : N Tower (65) ME CONNER BLOG(60) Forground 5/20



MHT No. AA-ZR7 NAVAL RADIO STATION ANNAPOlis Anne Arunde/County A. DONALD LAWRENCE October 1999 New; & Tower (64) (INOGENATIVE) SE POINET Of BOBG 298 4/20



1-87870/65 MH9 NO AA-8127 NAVAL RADIO STATION ANNAPOLIS ANNE Arurdel County A. DONALD LAWRENCH View. N Tower (65) gelar BOC (257) Forground



MHE NO. AA-2127 NAVAL ZADIO STATION Annapolis, Anne Avandel County A. DONALD LAWRENCE October 1999 liew: Neeter, NE corner BIPG 60. Brekground 7/20 W Tower (66)



1-87830 10 WHT No. AA-2127 NAVAL RADIO Station PANNAPOLIS, ANNE Annale County A. DONALD LAWRE October 1999 View: W Tower (66) Selev Forground NW CONNER OF Bioc 60 Complex 0/20



1-8783012 MAT No. AA-2127 NAVAL PRODIO STATION PANAPOLIS Anne Arundel County A. Donald CAUPENCE October 1999 View: ENE slev, BLDG 60 9/10 STOWER BACKground (65)



1-87830/401 MAT NO. AA-2127 NAVAL RADIO Station Annuapolis, Anne Arundel Convity. A. DONALD LAWRENCE October 1999 View: 5 Tower (67) E elev Forground BLDG. 298 10/20



MHT No. AA-2127 NAVAL PAGE STATION ANNAPOTIS Anne Arandel County A. DONALD LAWRENCE Optober 1999 View: N Tower (63) Seleu, Foreground MIS. Riggings 1/20



1-87830/3 MHT NO AA-2127 NAVAL PLADIO Station Annapolis ANNE Arundel County Ai PONALD LAWRENCE October 1999 View . E elev DETAIL BUDG GO DOORWAY



187830/11 MHT No. AA-2127 NAVAL PADIO STATION ANNAPOLIS ANNE AVENDE | County A. DOWNLO LAWYENCE October 1999 View: W, SW Corner Bloc 60 13/20 HELIX HOUSE (69) BIELEV SWEND



1-87830 145 MHT No. AA-2127 NAUAL PADIO Station Annapolis ANNC Arundal County A Donald LAWVENCE October 1999 View: NE corner of BLDG 60 complex 14/20



MHT No AA - 2127 NAVAL RADIO STATION Annapolis Lune Arandel County A. DONALD LAWRENCE View: Machinery @ BASE OF W TOWER (#66)



MHT No. AA-2127 NAVAL BADIO Station ANNApolis Anne Arundel County AN DONALD LAWRENCE October 1999 View: BLDG#67, Helix House SE Clorner, pole AND EQUIPMENT.



2-87830-45 NHT NO AA-2127 NAVAL RADIO STATION AUNAPOLE Awne Arandel County A. Donald LAWRENCE October 1999 View; Welev Blob. 60 (inoperative) Forground 3/20 Het/x House (69) - WELEV. CENTER



287530-43 MHT NO. AA-2127 NAVAL BADIO Station Annapolis Anne Arundel County A. DonAld LAWRENCE October 1999 View. \$10 #68, HELIX House ¿ Tower DN Background (IN operative)



2-87830-41 MAT No. AA -2127 NAVAL RADIO STATION ANNAPOLIS Apple Arundel County A. DONALD LAWRENCE View: 1000 806 #68 HELLE HOUSE E, SE CLEV. BASE OF W Tower (#11)



2.87830-55 MAT No. AA-2127 Naval RADIO Station Annapolis Apple Arangel County A. PONALD LAWRENCE Uctuber 1999 View of complex Through golf conner Towers TONEYS: L(64) C(65) BACKGROUND C(67)

INDEX TO PHOTOGRAPHS

AA- 2/27 United States Naval Academy, North Severn Anne Arundel County

Photographer:

Lex F. Campbell

R. Christopher Goodwin & Associates, Inc.

1 of 3

View of Building NA74 looking north.

2 of 3

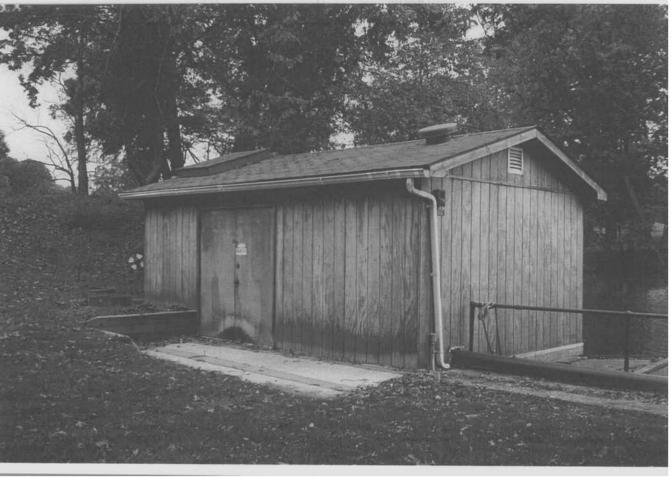
View of Building NA76 looking northwest.

3 of 3

View of Building NA77 looking northwest.



AA-2127 USNA, NOFTH SEVERN ANNE AFUNDEC L. CAMPBELL OCT. 1996 MO 540 C DICE SS SO BURNERS 8391 829 N, BUILDING NATH, FRONT & STOR ELECATIO of 3



AA-2127 USMA, NORTH SEVERN ANNE ARUNDEL L. CAMPBELL OCT. 1996 MID SHOO NW, BUILDING MA THE, FRONT & STAC 2 of 3



AA-2127 USNA, NORTH SEVERN ANNE ARUNDEL L. CAMPBELL DCT 1996 MO SHO MU, BUILDING NA77, 3 0 3